Premier MMT
TONE ARM

Specifications

overall length	305 mm
effective length (pivot to stylus)	239 mm
overhang	17.3 mm
offset angle	23.1°
mounting distance (record center to pivot point)	221.7 mm
maximum backswing	64 mm
cartridge weight range	Standard counterweight up to 8 grams. With extra weight, 8–14 grams.

MOUNTING AND OPERATING INSTRUCTIONS

1) Unfold and flatten template sheet. Cut out arm mounting template and base template along dotted lines. Note die-cut spindle hole on arm mounting template.
2) Place the mounting template on the spindle.
3) Rotate template on spindle to find the correct hole-drilling location. Although the hole can be located anywhere on the mounting arc (and still maintain the correct 221.7 mm spindle-to-pivot mounting distance), please take extreme care to be certain that the counterweight, cue lever, anti-skate platform, and fingerlift clear the side and back of the dust cover. Note that some dust covers slope inward and therefore have less clearance as the height above the mounting surface increases. Be sure to keep the template taut and flat during this process. Double check all factors before proceeding to the next step.
4) Push a needle through the template at the pivot point and, keeping the needle perpendicular to the mounting surface, mark the mounting board below. Because the paper's accuracy can be affected by environmental conditions, double check by using a metal ruler to measure the 221.7 mm distance between the center of the spindle and the needle mark.
5) Place the mounting base template so that the arrow is pointing toward the back of the turntable. Push a needle through the center of the mounting base template seating the point in the needle mark for arm mounting. Mark the center of the three mounting base holes.
6) Drill a ¾-inch hole, centered at the arm mounting mark, through the arm board.
7) Drill three 5/32" holes for the three base mounting bolts through the arm board. These holes are intended to be slightly larger than the bolts to allow fine adjustment in arm positioning. Be sure to remove all burrs around the holes after drilling so that the mounting base is level on the arm board.
8) Position mounting base on arm board so that the set-screw points toward the right, rear corner of the turntable. Insert three mounting bolts from the top. Mount washers and nuts from the bottom. Finger tighten.
9) Place the arm into the mounting base, letting it slide down as far as it will go. Measure the horizontal distance between the center of the spindle and the pivot point of the arm. Adjust the position of the base until this distance is 221.7 mm. Now tighten the three base mounting nuts securely. Recheck spindle-to-pivot distance.
10) Unwrap headshell and fingerlift. Loosely mount the cartridge to the headshell and attach the headshell wires to the phono cartridge. Use of the fingerlift is optional. The headshell uses standard color coding: Red R+, Green R−, White L+, Blue L−. Place headshell into tone arm and firmly tighten the headshell locking collar.
11) Twist the counterweight onto the back of the tone arm. For cartridges weighing up to 8 grams, only the main counterweight is necessary. For cartridges between 8–14 grams, the accessory counterweight should be fastened on the back of the main counterweight. To secure accessory counterweight, tighten set screw. Be sure accessory counterweight rests firmly against the back of main counterweight disk. Set anti-skate force to 0 by turning the knob on the right side of the arm pivot completely counterclockwise. Roughly balance the arm by moving the counterweight backward and forward until the arm "floats" parallel to the platter. Rotate just the stylus force indicator dial (not the counterweight) until the 0 lines up with the

white line on the counterweight support shaft. The indicator ring has two scales; the inner scale is calibrated for use when the main counterweight alone is used. The outer scale is calibrated for use when the main and accessory counterweights are used. Now grasp the entire counterweight and rotate it and the indicator ring counterclockwise until the 1 gram mark lines up with the white line.

12) Adjust the height of the tone arm so that with the stylus on a record, the arm would be parallel to the platter. Trial tighten set screw on mounting base, using the smaller of the two allen wrenches provided.

13) Using a high quality alignment protractor, such as the Dennesen Soundtractor, adjust the cartridge overhang (17.3) mm and horizontal tracking angle. Tighten the cartridge mounting screws.

14) Plug the supplied audio cable into the bottom of the tone arm.

15) Carefully rebalance the arm as described in step 11, and set the cartridge tracking force per manufacturer's recommendation. Adjust vertical tracking angle (stylus rake angle) to manufacturer's specification by loosening the set screw on the mounting base and moving the arm post up or down as necessary. Firmly tighten set screw on mounting base.

16) The anti-skating compensation is determined by gently lowering and raising the arm with the cue device so that the stylus is alternately lowered into the record groove. Observe: At the moment the stylus contacts the record groove, the stylus will be pulled in toward the turntable spindle. Increase the anti-skate compensation by turning the dial until there is no inward deflection when the stylus contacts the record groove. Use of test records to set the anti-skate compensation is *not* recommended. Excessive modulation found on these records will result in overcompensation and a resultant loss of fine detail in depth and imaging.

VARIABLE FLUID DAMPING

The Premier MMT tone arm can be used with or without fluid damping. We recommend using the fluid damping only when the cartridge being used has very low dynamic compliance (below 10×10^{-6} cm/dyne).

The top of the tone arm has a hemispherical reservoir for holding the damping fluid. The knob on the top of the bearing housing is used for adjusting the amount of damping. Turn clockwise to increase, counterclockwise to decrease damping action. To install damping fluid, cut the tip off the fluid vial and carefully empty contents of the vial into the opening in the top of the damping knob.

Important Note: When removing the arm for shipment or service, the damping fluid must be removed. If the fluid is not removed and the arm is tipped on its side, fluid will run out of the reservoir cup and onto the tone arm bearings. Damping fluid in the bearings will cause excess friction and may necessitate expensive repairs.

To remove damping fluid, loosen the set screw (located on the back side of the bracket that holds the damping adjustment knob); remove damping knob by turning it counterclockwise. Use damping fluid vial as an eyedropper and remove the fluid from the reservoir cup. Any fluid that cannot be removed with the vial should be removed with a cotton swab. Replacement fluid is available at a nominal price.

BEARINGS

Each Premier MMT tone arm undergoes careful quality control, both at the factory and at Sumiko's Berkeley, CA headquarters. Among our Quality Assurance procedures are inspection of bearings for freedom of movement and lack of play. Please do not attempt to make bearing adjustment yourself as this may permanently damage the bearings and will void your warranty. Should repairs or adjustments be necessary, please contact your dealer or Sumiko, Inc.

sumiko, Inc. P.O. Box 5046, Berkeley, CA 94705 415/843-4500